



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Jason T. Griffin, et al.

Art Unit: 2675

Application No.: 09/976,536

Examiner: Amr A. Awad

Filed: 10/12/2001

Attorney Docket No.: 555255012287

For: Dual Mode Mobile Communication Device

APPEAL BRIEF

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By _____

Debra Pigeon

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is filed in response to the Final Office Action mailed June 22, 2005, which finally rejected pending claims 44, 45 and 47-103 of the instant application. A Notice of Appeal and Request for Pre-Appeal Brief Conference was received by the U.S. Patent Office on November 14, 2005. A Notice of Panel Decision from Pre-Appeal Brief Review was mailed on December 28, 2005.

I. Real Parties In Interest

The real party in interest is Research In Motion Limited as evidenced by an assignment recorded at Reel/Frame 012424/0205.

II. Related Appeals And Interferences

There are no related appeals or interferences to the instant application.

III. Status Of Claims

Claims 44, 45 and 47-103 are pending and are finally rejected.

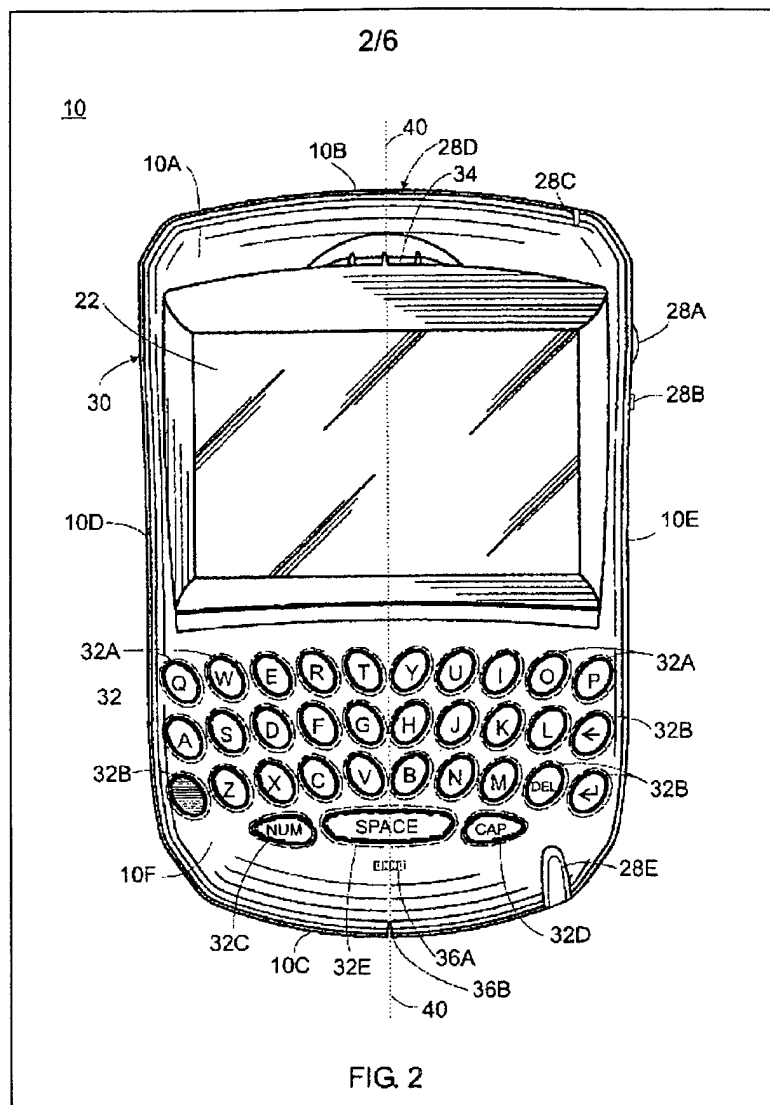
IV. Status Of Amendments

No amendments have been filed subsequent to the final rejection.

V. Summary Of Claimed Subject Matter

A. Independent Claim 44

Independent claim 44 describes a dual mode mobile communication device that is capable of sending and receiving voice communications when operating in a voice communication mode and is also capable of sending and receiving data communications when operating in a data communication mode. Figure 2 of the application, set forth below, provides an example of such a claimed device.



The device (10) includes a single, integrated device housing (10A). The single, integrated device housing (10A) is not a “clamshell” design as described in the Background section of the application:

For example, a known so-called “clamshell” design necessitates movement of two hinged housing sections, on which a display, keypad, speaker and microphone are mounted, to operate the device. In a closed position, the housing sections cover one or more of the display, keypad, speaker and microphone, such that one or more device functions cannot be used without first moving the device housing

sections relative to each other to expose certain components. Such designs with movable housing sections can not only be inconvenient for a user, difficult to manufacture and prone to breakage of the movable parts, but can also require complicated and often unreliable connections between the parts.
(Background, p. 2, line 16 through page 3, line 2)

The claimed device (10) includes two interfaces, a voice communication interface and a data communication interface. (Detailed Description, p. 17, lines 18-25; Fig. 2) The voice communication interface is configured in the device housing (10A) and includes a speaker (34), a display (22) and a microphone (36A), and is used for operating the device (10) in the voice mode of operation, *e.g.*, by placing a phone call. (Detailed Description, p. 17, lines 20-21; p. 13, lines 19-20) The data communication interface is also configured in the device housing (10A) and includes the same display (22) as the voice communication interface and a complete alphanumeric keyboard laid out in the QWERTY-style (32) for operating the device in the data mode of operation, *e.g.*, sending an e-mail message. (Detailed Description, p. 17, lines 21-22; p. 13, lines 19-20; p. 14, lines 13-14; p. 12, lines 13-15) The QWERTY keyboard is positioned within a front surface (10F) of the claimed single, integrated device housing (10A). (Detailed Description, p. 14, lines 20-21)

The voice and data communication interfaces are configured in the device housing (10A) such that the speaker (34) is positioned at the top of the device housing, the display (22) is positioned below the speaker and the QWERTY keyboard (32) and the microphone (36A) are positioned below the display. (Fig. 2; Detailed Description, p. 14, lines 5-12) The device (10) also includes a wireless transceiver (11) for sending and receiving voice communications when in the voice mode of operation and data communications when in the data mode of operation. (Fig. 1; Detailed Description, p. 12, line 9 through p. 13, line 8) This configuration of the

claimed invention distinguishes it from prior devices, as discussed in the Background section of this application, which required substantial re-orientation when switching between voice and data modes of operation:

Other designs may provide a static housing, but require substantial re-orientation of the device to switch between voice communications and other device functions. Devices according to a further known substantially rectangular design are intended to be used in one orientation for voice communication functions and in a rotated orientation for other functions. . . . In order to accommodate a larger keyboard than a traditional 12-key telephone keypad, however, the keyboard is positioned "sideways" on the device. . . . Devices requiring reorientation to use different functions can be both inconvenient and confusing when a user attempts to quickly switch between functions.

(Background, p. 3, lines 3-15)

VI. Grounds Of Rejection To Be Reviewed On Appeal

- Whether claims 44-45, 47-64, 68-69, 75-86 and 91-97 are unpatentable under 35 U.S.C. § 103 as being obvious over Horie (US Patent No. 6,731,227) in view of Le (US Patent No. 6,744,890).

- Whether claims 44-45 and 47-103 are unpatentable under the judicially created doctrine of obviousness-type double patenting over claims 1-48 of Griffin I (US Patent No. 6,278,422) in view of Uchikura (US Patent No. 5,337,346; or over claims 1-47 of Griffin II (US Patent No. 6,452,588); or over claims 1-211 of Griffin III (US Patent No. 6,489,950).

VII. Argument

A. Rejections Under 35 U.S.C. § 103 Over Horie in view of Le

1. Claim 44

To establish the *prima facie* case of obviousness under 35 U.S.C. § 103, the Examiner must meet three basic criteria: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the prior art references being combined must teach or suggest all the claim limitations. (MPEP § 2143) In addition, the suggestion or motivation to combine, and the reasonable expectation of success must be found in the prior art, and not in the applicant's disclosure. (*In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (*See also, Ex Parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inte. 1985) "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references."))

In establishing the suggestion or motivation to combine, the Examiner should consider the following factors: (1) the prior art must suggest the desirability of the claimed invention; (2) where the teachings of the prior art conflict, the Examiner must weigh the suggestive power of each reference; (3) the fact that references can be combined or modified is not sufficient to establish obviousness; and (4) the proposed modification cannot render the prior art unsatisfactory for its intended purpose or change the principle of operation of the prior art.

(MPEP 2143.01) Regarding factor (2), where the references being combined contain conflicting teachings, the Examiner must weigh the power of each reference to suggest solutions to the person of ordinary skill in the art and must consider the degree to which one of the references might discredit the other. (*In re Young*, 927 F.2d 588, 18 USPQ2d 1089 (Fed. Cir. 1991))

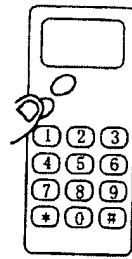
In the Final Office Action, the Examiner rejected independent claim 44 over the combination of Horie (primary reference) and Le (secondary reference). This obviousness rejection is faulty, however, under the established guidelines for proving the *prima facie* case of obviousness stated above because:

(1) the combination of Horie and Le would not meet all of the claim limitations recited in claim 44 in that the combined device would still have to be “substantially reoriented” in order to operate in voice and data modes; and

(2) there is no suggestion or motivation to combine Horie and Le – to the contrary the Horie reference explicitly discredits the combination, and the combination, even if it were made, would render the Horie reference unsatisfactory for its intended purpose and would radically change its principle of operation.

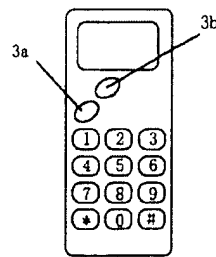
Horie describes a standard cell phone arrangement having a 12-key telephone keypad. Figures 3A-3C of the Horie patent, below, show this arrangement.

Fig. 3A



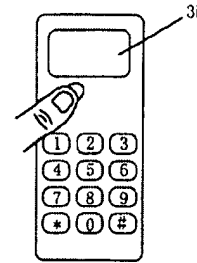
3c

Fig. 3B

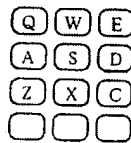


3d

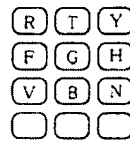
Fig. 3C



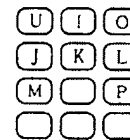
3e



3f



3g



3h

As seen in these figures, Horie does not disclose a device having a complete alphanumeric keyboard laid out in the QWERTY style for use in a data communication mode, as recited in claim 44. Instead, Horie describes what it terms a “virtual” or “imaginary” QWERTY keyboard utilizing three modified versions of the standard 12-key telephone keypad. In Horie, a user of the device selects from a pair of function keys 3a, 3b on the device in order to switch the standard 12-key telephone keypad between three separate alphabetic key assignments, a first assignment (3f) showing indicia for the letters Q, W and E in the first row of three keys, a second assignment (3g) showing indicia for the letters R, T and Y in the first row of three keys, and a third assignment (3h) showing indicia for the letters U, I, and O. Thus, in Horie, indicia of only

a sub-set of the 26 letters of the English alphabet are available at a given instant, and therefore it is not a complete alphanumeric keyboard.

This point is made in the Horie reference itself, which characterizes its' keyboard arrangement as "virtual" or "imaginary":

A character input device which allows the user to input characters *in a virtual qwerty arrangement* on a mobile information or a palm-sized terminal. (Horie, Abstract)

According to the first and second embodiments, the present invention provides a character input device which has three switching functions, for example, as shown in FIG. 3B, . . . *to virtually reproduce the image of the qwerty arrangement on the character input device.* (Horie, Col. 2, ll. 60-67)

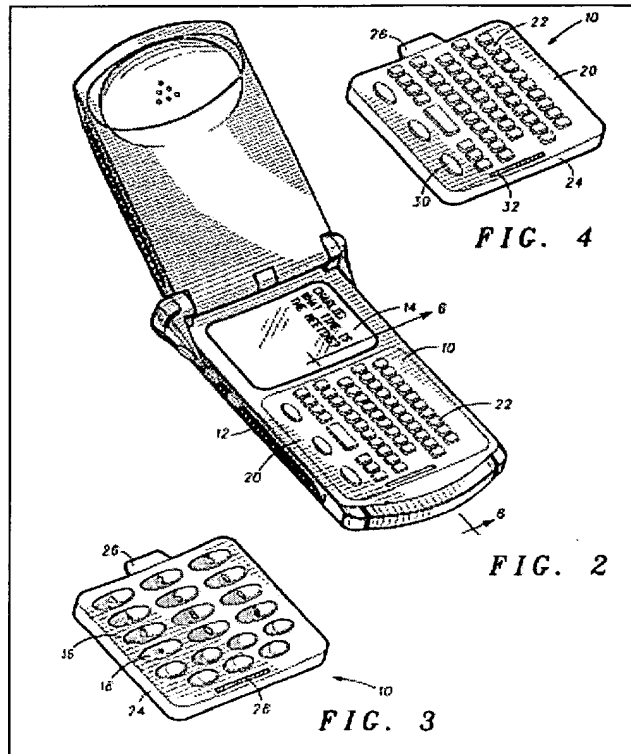
Assume now that a user inputs an address for an e-mail on a mobile terminal. First, the user *imagines the qwerty arrangement.*" (Horie, Col. 5, ll. 1-2)

As these quotations and the drawing figures demonstrate, the operating principle of the Horie reference is that the user of the device must "imagine" the full QWERTY arrangement, and by providing the selector keys (3A, 3B) on the device, the user can thereby switch between the three imaginary portions of the keyboard in order to select a particular letter key. Critical to this principle of operation is that the QWERTY arrangement is imaginary or virtual – i.e, it is not a real QWERTY keyboard.

This point regarding Horie's principle of operation is further emphasized in the reference, which explicitly teaches away from the kind of keyboard recited in claim 44, going so far as to say that it cannot be employed in a mobile communication device:

However, since small-sized character input device for use with a mobile telephone or the like encounters difficulties in accommodating keys for 26 alphabet letters, *the qwerty arrangement cannot be employed.* (Horie, Col. 1, ll. 34-37)

In order to make up for this clear deficiency in the Horie reference, the Examiner combined Horie's 12-key telephone device having a "virtual" arrangement with the Le reference, which is a "clamshell" cell phone device having two interchangeable keypads – a standard 12 key telephone keypad and a separate alphanumeric keypad. Figures 2, 3 and 4 of Le are set forth below.



In order to operate the Le cell phone in a data mode, the voice keypad (10 in Fig. 3) must be physically removed from the device housing and a completely separate data keypad (10 in Fig. 4) must be substituted. As clearly shown in Fig. 2, the data keypad is positioned in the device housing in a manner that would require that the user substantially re-orient the device,

i.e., by rotating it 90 degrees, in order to switch from a voice mode of operation and a data mode of operation.

The final rejection over Horie and Le should be reversed because the combination of references does not meet all of the claim limitations recited in claim 44. Specifically, the hypothetical combined device would still have to be “substantially reoriented” in order to operate in voice and data modes, and thus does not meet the claim limitation that the device be operable in voice or data modes “without reorienting the device.”

If the removable voice and data keypads of Le were physically combined with Horie’s cell phone, the only possible manner in which the data keypad could fit within Horie’s thin housing would be to rotate the keyboard 90 degrees, similar to how the keypad is fitted into Le’s clamshell phone. Thus, in the data mode of operation, the hypothetical combined device would be held in the hands with the display being to the left, and the keyboard being in the middle of the device. Clearly this is an awkward configuration and would be very difficult to use. When used in the voice mode of operation, presumably by substituting the removable voice keypad for the data keypad, the device would clearly have to be substantially reoriented in order to initiate a voice call. In the device disclosed and claimed in the present application, however, the user can initiate a voice call or a data message without having to rotate the device, as recited in the limitation “the dual mode mobile communication device being operable in either the voice mode of operation or the data mode of operation without reorienting the device.” The Examiner did not address this problem with the hypothetical combination.

In addition to requiring “substantial reorientation,” the hypothetical combined device with the separate voice and data keypads would also clearly not meet the claim requirement of a “single, integrated device housing,” because the use of two separate keypads is not “single” and is not “integrated.” Thus, for all these reasons the combination of Horie and Le does not disclose or suggest all of the limitations of the claim, and therefore the *prima facie* case of obviousness has not been met by the Examiner.

Further negating the *prima facie* case of obviousness is the fact that there is no suggestion or motivation to combine Horie and Le, even if the combination of the two references disclosed all of the claimed subject matter. To the contrary, the Horie reference explicitly discredits the combination, and the combination, even if it were made, would render the Horie reference unsatisfactory for its intended purpose and would radically change its principle of operation.

The sum total of the Examiner’s reasoning in relation to the motivation to combine analysis is set forth here:

“Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Le, to include a Qwerty keyboard to replace the keypad in Horie’s device so as motivated by Le, to provide an improved keyboard with greater number of keys for entering larger amounts of text data into the wireless telephone, while still occupying a limited space (col. 1, line 63 to col. 2, line 4)”

The citation to Le at col. 1, line 63 to col. 2, line 4, however, does not provide any motivation for combining Le with Horie. Rather, this portion of Le indicates that a user of a mobile device would prefer to have two separate keypads, a first keypad with larger keys for making phone calls and a second keypad with smaller but more keys for typing messages. This citation to Le

finishes with the statement: “Accordingly, there exists a need to provide an improved keypad that is adaptable between different configurations while still occupying a limited space.”

The “adaptable” feature of Le is accomplished using two separate keypads, one for voice calls and one for data messages. Thus, Le would not motivate a combination that provides a “single, integrated device housing,” as called for in claim 44 of the present application, nor would Le motivate a combination that did not require substantial reorientation, which is also called for in claim 44. In sum, there is nothing in the cited portion of Le that would motivate a person of skill in the art to combine Le’s keypads with Horie’s cell phone to arrive at the subject matter of claim 44.

Notably missing from the Examiner’s motivation to combine argument is any citation to the primary reference, Horie. The reason that the Examiner cannot cite to Horie in support of this argument is because Hore explicitly teaches away from the combination made by the Examiner, and because the combination of Le’s separate keyboards into Horie’s cell phone would dramatically alter Horie’s primary principle of operation.

The Horie reference teaches that a QWERTY keyboard cannot be employed, and therefore any motivation to combine Horie with Le is negated by this contradictory teaching:

“However, since small-sized character input device for use with a mobile telephone or the like encounters difficulties in accommodating keys for 26 alphabet letters, *the qwerty arrangement cannot be employed.*” (Horie, Col. 1, ll. 34-37)

In order to accept that the person of skill in the art would be motivated to combine Le’s removable alphanumeric keypad with Horie would require that the text of Horie be ignored. The

MPEP is clear that when one of the references is flat out contradictory to the teaching of the other reference, the Examiner must take this negative teaching into account when making out any allegation of the motivation to combine. The Examiner did not even cite to Horie for any motivation to combine because it is clear that none exists – and to the contrary it is clear that Horie would teach the person of skill in the art not to attempt a full QWERTY keyboard.

Finally, any motivation to combine Le's removeable alphanumeric keypad with Horie is negated by the fact that doing so would completely undermine the primary operating principle of Horie – which is the concept of a “virtual” or “imaginary” keyboard made up of just 12 keys. Horie's cell phone uses the standard 12-key telephone keypad, with which the cell phone user would be very familiar. The “virtual” keyboard in Horie is an overlay onto the traditional 12 key phone pad so that the phone retains the traditional look-and-feel of a phone, but is also useable for sending messages, albeit awkwardly through the “virtual” key arrangement. Substituting Le's full alphanumeric keypad, therefore, would destroy the traditional 12 key telephone arrangement of Horie, and thus would undermine its primary operating principle. For all of these reasons, the Examiner has failed to show a sufficient motivation to combine Horie with Le, and therefore the obviousness rejection should be reversed.

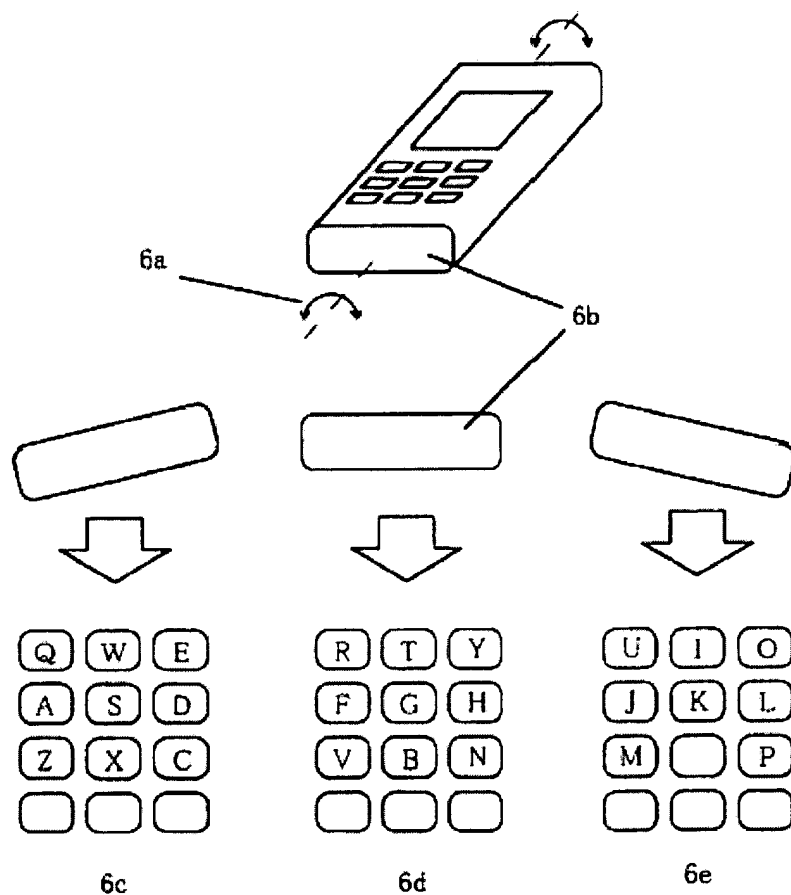
2. Claim 56

Claim 56 depends from claim 44 and adds the limitation that “the QWERTY keyboard includes a plurality of letter keys, wherein approximately half of the letter keys are positioned on a left hand side of the device housing and approximately half of the letter keys are positioned on a right hand side of the device housing.” Thus, as shown in Figure 2 of the present application,

the keys of the QWERTY keyboard are distributed horizontally across the device housing which makes the device useable in the data mode without having to re-orient the device from the voice mode.

The Examiner rejected claim 56 over Horie in view of Le by simply stating, with no basis whatsoever in the reference, “As to claim 56, figure 6 of Horie reference fairly reads on the claimed limitations of claim 56.” Figure 6 of Horie is shown below.

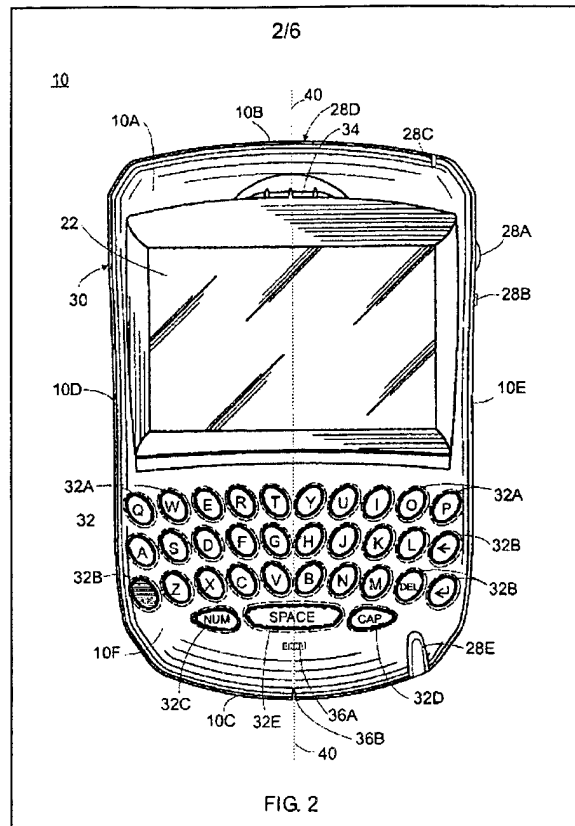
Fig. 6



It is not clear how this figure of Horie even comes close to describing the subject matter of claim 56. In fact, the Examiner has conceded that Horie does not disclose the claimed “complete alphanumeric keyboard laid out in the QWERTY style (QWERTY keyboard),” and therefore it could not possibly supply the additional limitations of claim 56. The rejection, therefore, should be reversed.

3. Claim 57

Claim 57 depends from claims 56 and 44, and adds the limitation that “the letter keys on the left hand side of the device housing are tilted at a negative angle with respect to a vertical reference line through the device housing and the letter keys on the right hand side of the device housing are tilted at a positive angle with respect to the vertical reference line.” Figure 2 of the present application, below, shows this configuration of the keys in which the keys are tilted at two angles. The oval-shaped keys shown in Figure 2 on the left hand side of the device, such as the Q, W, E, R and T keys, are tilted at a negative angle with respect to the vertical reference line (40), whereas the keys on the right hand side of the device, such as the Y, U, I, O and P keys, are tilted at a positive angle with respect to the same reference line (40).



The Examiner rejected claim 57 over Horie in view of Le by pointing once again to Figure 6 of Horie (above), and stating “the claim is broad enough because the shape of the keys are not claimed; rather the broad interpretation of the claim is that the location of keys having a negative angle and positive angle with respect the vertical reference line. Such limitation is fairly taught by fig. 6 of Horie.” A quick examination of Figure 6 of Horie, however, shows that it does not show keys which are tilted at any angles to a vertical reference line through the device. In fact, the keys in Horie are not tilted at all, but instead are arranged normal to a vertical reference line through the housing. The rejection, therefore, should be reversed.

4. Claims 76-77

Claim 76 depends from claims 75 and 44, and adds the following elements to the claimed subject matter:

a memory store for storing an operating system and one or more application programs that are executed by the microprocessor, the one or more application programs including at least a voice communication module and a data communication module;

wherein the voice communication module controls the voice communication interface when the device is in the voice mode of operation and the data communication module controls the data communication interface when the device is in the data mode of operation.

Importantly, claim 76 introduces a memory store having an operating system and one or more application programs that are executed by the microprocessor, where the one or more application programs include a voice communication program and a data communication program. Claim 77 depends from claim 76 and further indicates that one of the one or more application programs is a personal information manager program.

The Examiner summarily rejected claims 76 and 77 over Horie in view of Le by stating only that “it is inherent in Horie’s device to have microprocessor, memory to be connected to the microphone, the display, the speaker and the keyboard.” The Examiner made no attempt to show where Horie teaches the claimed operating system or the claimed voice, data and PIM

application programs as set forth in claims 76 and 77. This rejection is clearly faulty and should be reversed.

5. Claim 78

Claim 78 depends from claim 44 and adds the limitation that “the transceiver includes a pair of transmitter/receivers, a first transmitter/receiver for sending and receiving voice communications and a second transmitter/receiver for sending and receiving data communications.

The Examiner rejected claim 78 over Horie in view of Le, only stating that “As to claim 78, Horie (figures 3 & 6) shows telephone, which fairly reads on the cited limitations of the claim.” Clearly this rejection is not supportable. The Examiner made no attempt to show where in Horie there is a teaching of a first transmitter/receiver for sending and receiving the voice communications and a second transmitter/receiver for sending and receiving the data communications. The rejection should be reversed.

6. Claim 80

Claim 80 depends from claim 44 and adds the limitation of “a short range RF communications system.” The Examiner rejected this claim, only stating “As to claim 80, Horie teaches using RF communication (inherent for mobile phone.)” Once again, however, the Examiner failed to consider the claim language, which requires a “short range” RF communication system. Figure 1 of the present application, block 40, shows such a short-range RF communication system. No such short-range RF system is shown or described anywhere in

Horie. To the contrary, if anything is “inherent” in Horie it would be a long-range RF system for use in standard wireless telephony. The rejection should be reversed.

B. Obviousness Type Double Patenting Rejection Over Assignee’s Prior Patents

The Examiner’s conclusion that the claims of the present application are substantially similar to the claims of the assignee’s prior patents US 6,278,442, US 6,452,588 and US 6,489,950 is wrong, and thus the double patenting rejection cannot be supported.

The claims of these prior patents are not restricted to a dual mode device as set forth in claim 44. Moreover, these prior claims do not recite “a single integrated device housing that does not include two or more hinged housing sections,” nor do they recite “a voice communication interface,” nor do they recite the positioning of the speaker and the microphone as set forth in claim 44, nor do they recite that the dual mode device is “operable in either the voice mode of operation or the data mode of operation without reorienting the device.” Because all of these limitations are missing from the claims of these prior patents, the double patenting rejection should be withdrawn.

VIII. Claims Appendix

A claims appendix containing a copy of the claims subject to this appeal is attached.

IX. Evidence Appendix

No evidence is being submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132, nor is

there any other evidence entered by the Examiner or relied upon by the Applicant. An evidence appendix indicating "None" is attached.

X. Related Proceedings Appendix

There are no related proceedings. An related proceedings appendix indicating "None" is attached.

Respectfully submitted,

Date: 4/27/06

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CLAIMS APPENDIX

Claims 1-43 (Cancelled)

44. (Previously Presented) A dual mode mobile communication device, comprising:

a single, integrated device housing that does not include two or more hinged housing sections;

a voice communication interface configured in the device housing for operating the device in a voice mode of operation, the voice communication interface comprising a speaker, a display and a microphone;

a data communication interface configured in the device housing for operating the device in a data mode of operation, the data communication interface comprising the display and a complete alphanumeric keyboard laid out in the QWERTY style (QWERTY keyboard), the QWERTY keyboard being positioned within a front surface of the single, integrated device housing; and

a wireless transceiver for sending and receiving voice communications when in the voice mode of operation and data communications when in the data mode of operation;

wherein the voice communication interface and the data communication interface are configured in the single, integrated device housing such that the speaker is positioned at the top of the device housing, the display is positioned below the speaker, and the QWERTY keyboard and the microphone are positioned below the display;

the dual mode mobile communication device being operable in either the voice mode of operation or the data mode of operation without reorienting the device.

45. (Previously Presented) The dual mode mobile communication device of claim 44, wherein the single, integrated device housing further comprises a back surface, the device having a generally rectangular shape.

46. (Cancelled)

47. (Previously Presented) The dual mode mobile communication device of claim 45, wherein the device housing further comprises a plurality of side surfaces connecting the front surface to the back surface, the plurality of side surfaces including a top side surface and a bottom side surface.

48. (Previously Presented) The dual mode mobile communication device of claim 47, wherein the speaker and display of the voice communication interface are positioned on the front surface of the device housing and the microphone is positioned on the bottom side surface of the device housing.

49. (Previously Presented) The dual mode mobile communication device of claim 44, wherein the microphone is positioned below the QWERTY keyboard.

50. (Previously Presented) The dual mode mobile communication device of claim 44, wherein the speaker, display, QWERTY keyboard, and microphone are each aligned along a vertical reference line through the device housing.

51. (Previously Presented) The dual mode mobile communication device of claim 44, wherein the display and the QWERTY keyboard are aligned along a vertical reference line through the device housing, and wherein the speaker and microphone are offset from the vertical reference line.

52. (Previously Presented) The dual mode mobile communication device of claim 44, wherein the display is rectangular.

53. (Previously Presented) The dual mode mobile communication device of claim 44, wherein the QWERTY keyboard includes a plurality of letter keys, a plurality of function keys and a space bar key.

54. (Previously Presented) The dual mode mobile communication device of claim 53, wherein the plurality of function keys include a backspace key, an enter key and a delete key.

55. (Previously Presented) The dual mode mobile communication device of claim 53, wherein the QWERTY keyboard further includes a NUM lock key and a CAP lock key, wherein the NUM lock key and the CAP lock key are positioned on either side of the space bar key.

56. (Previously Presented) The dual mode mobile communication device of claim 44, wherein the QWERTY keyboard includes a plurality of letter keys, wherein approximately half of the letter keys are positioned on a left hand side of the device housing and approximately half of the letter keys are positioned on a right hand side of the device housing.

57. (Previously Presented) The dual mode mobile communication device of claim 56, wherein the letter keys on the left hand side of the device housing are tilted at a negative angle with respect to a vertical reference line through the device housing and the letter keys on the right hand side of the device housing are tilted at a positive angle with respect to the vertical reference line.

58. (Previously Presented) The dual mode mobile communication device of claim 57, wherein each key on the left hand side is tilted at a common negative angle with respect to the vertical reference line and wherein each key on the right hand side is tilted at a common positive angle with respect to the vertical reference line.

59. (Previously Presented) The dual mode mobile communication device of claim 58, wherein the common negative angle and the common positive angle are complementary angles.

60. (Previously Presented) The dual mode mobile communication device of claim 57, wherein the letter keys are oblong shaped.

61. (Previously Presented) The dual mode mobile communication device of claim 60, wherein the oblong shaped letter keys are oval shaped.

62. (Previously Presented) The dual mode mobile communication device of claim 60, wherein the oblong shaped keys are rectangular shaped.

63. (Previously Presented) The dual mode mobile communication device of claim 60, wherein the oblong shaped keys are diamond shaped.

64. (Previously Presented) The dual mode mobile communication device of claim 56, wherein the letter keys are organized into three rows of keys, wherein each key in each row of keys is horizontally aligned across a front surface of the device housing with the other keys in the row of keys.

65. (Previously Presented) The dual mode mobile communication device of claim 56, wherein the letter keys are organized into three rows of keys, wherein the keys in each row of keys are configured along an arc across a front surface of the device housing.

66. (Previously Presented) The dual mode mobile communication device of claim 65, wherein the arc is convex.

67. (Previously Presented) The dual mode mobile communication device of claim 65, wherein the arc is concave.

68. (Previously Presented) The dual mode mobile communication device of claim 56, wherein the plurality of letter keys are symmetrically shaped.

69. (Previously Presented) The dual mode mobile communication device of claim 68, wherein the letter keys are square shaped.

70. (Previously Presented) The dual mode mobile communication device of claim 68, wherein the letter keys are circular shaped.

71. (Previously Presented) The dual mode mobile communication device of claim 44, further comprising a serial port mounted along a side surface of the device housing.

72. (Previously Presented) The dual mode mobile communication device of claim 44, further comprising at least one auxiliary input/output device mounted along a side surface of the device housing.

73. (Previously Presented) The dual mode mobile communication device of claim 72, wherein the auxiliary input/output device is a thumbwheel.

74. (Previously Presented) The dual mode mobile communication device of claim 72, wherein the auxiliary input/output device is a LED.

75. (Previously Presented) The dual mode mobile communication device of claim 44, further comprising:

a microprocessor, coupled to the transceiver, the display, the QWERTY keyboard, the microphone and the speaker, for controlling the operation of the device.

76. (Previously Presented) The dual mode mobile communication device of claim 75, further comprising:

a memory store for storing an operating system and one or more application programs that are executed by the microprocessor, the one or more application programs including at least a voice communication module and a data communication module;

wherein the voice communication module controls the voice communication interface when the device is in the voice mode of operation and the data communication module controls the data communication interface when the device is in the data mode of operation.

77. (Previously Presented) The dual mode mobile communication device of claim 76, wherein the one or more application programs further include a personal information manager application program.

78. (Previously Presented) The dual mode mobile communication device of claim 44, wherein

the transceiver includes a pair of transmitter/receivers, a first transmitter/receiver for sending and receiving voice communications and a second transmitter/receiver for sending and receiving data communications.

79. (Previously Presented) The dual mode mobile communication device of claim 44, wherein the transceiver includes at least one antenna, a transmitter and a receiver coupled to the at least one antenna, and a digital signal processor for communicating with the transmitter and the receiver.

80. (Previously Presented) The dual mode mobile communication device of claim 44, further comprising a short range RF communications system.

81. (Previously Presented) The dual mode mobile communication device of claim 44, wherein the transceiver sends and receives voice communications to and from a wireless voice network and wherein the transceiver sends and receives data communications to and from a wireless data network.

82. (Previously Presented) The dual mode mobile communication device of claim 81, wherein the wireless voice network is the GSM network and the wireless data network is the GPRS network.

83. (Previously Presented) The dual mode mobile communication device of claim 76, wherein

the memory store includes a file system for storing user information in the dual mode device.

84. (Previously Presented) The dual mode mobile communication device of claim 44, wherein the single, integrated housing includes a front surface, a rear surface, and a plurality of side surfaces that couple the front surface to the rear surface.

85. (Previously Presented) The dual mode mobile communication device of claim 84, wherein the speaker, display, QWERTY keyboard and microphone are mounted within the front surface of the device housing.

86. (Previously Presented) The dual mode mobile communication device of claim 84, wherein the QWERTY keyboard is symmetrically positioned from two of the side surfaces in the front surface.

87. (Previously Presented) The dual mode mobile communication device of claim 84, further comprising a thumbwheel input device mounted within one of the side surfaces adjacent to the display.

88. (Previously Presented) The dual mode mobile communication device of claim 84, further comprising a thumbwheel input device mounted within the front surface.

89. (Previously Presented) The dual mode mobile communication device of claim 44, further

comprising:

an infrared data port for wireless transmitting and receiving data with another mobile communication device having a similar infrared data port.

90. (Previously Presented) The dual mode mobile communication device of claim 44, further comprising:

a mode key for switching the device between the voice mode of operation and the data mode of operation.

91. (Previously Presented) The dual mode mobile communication device of claim 84, wherein the front, rear and plurality of side surfaces are formed using two separate device housing sections coupled together to form the single, integrated device housing.

92. (Previously Presented) The dual mode mobile communication device of claim 91, wherein the two separate device housing sections are coupled together using a plurality of fasteners.

93. (Previously Presented) The dual mode mobile communication device of claim 92, further comprising a single circuit board for mounting the display, keyboard and speaker, the single circuit board being positioned within the two separate device housing sections and maintained in place using the plurality of fasteners.

94. (Previously Presented) The dual mode mobile communication device of claim 44, further

comprising:

a personal information manager (PIM) interface comprising the display, the QWERTY keyboard, and a PIM application program for operating the device in a PIM mode of operation.

95. (Previously Presented) The dual mode mobile communication device of claim 94, wherein the PIM application is configured to generate and store a plurality of PIM data items in a PIM database stored on the dual mode mobile communication device, the PIM data items including calendar data items, appointment data items and/or task data items.

96. (Previously Presented) The dual mode mobile communication device of claim 94, wherein the PIM application interacts with the voice communication interface to manage and process received voice calls and voice messages at the dual mode mobile communication device.

97. (Previously Presented) The dual mode mobile communication device of claim 94, wherein the PIM application interacts with the data communication interface to manage and process received data messages and to store the data messages in the PIM database on the dual mode mobile communication device.

98. (Previously Presented) The dual mode mobile communication device of claim 94, further comprising a serial port for interfacing the dual mode mobile communication device to a host computer system.

99. (Previously Presented) The dual mode mobile communication device of claim 98, wherein the serial port is used to synchronize data stored within the dual mode mobile communication device with data stored at the host computer system.

100. (Previously Presented) The dual mode mobile communication device of claim 99, wherein the data stored within the dual mode mobile communication device may be synchronized with the data stored at the host computer system over a wireless network in addition to being synchronized using the serial port.

101. (Previously Presented) The dual mode mobile communication device of claim 98, wherein the serial port is used to configure the operation of the device via a software application operating on the host computer.

102. (Previously Presented) The dual mode mobile communication device of claim 98, wherein the serial port is used to load application programs from the host system to the dual mode mobile communication device.

103. (Previously Presented) The dual mode mobile communication device of claim 98, wherein the serial port is used to load an encryption key from the host system to the dual mode mobile communication device to facilitate secure data communications via the data communication interface.

EVIDENCE APPENDIX



NONE

(No evidence is being submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132, nor is there any other evidence entered by the Examiner or relied upon by the Applicant)

RELATED PROCEEDINGS APPENDIX



NONE

(There are no related proceedings)